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Filed : March 23, 2004

REMARKS

Claim 8 has been amended to clarify the invention. Claim 28 has been added. Support can be found in Fig. 4, for example. The specification has been amended to correct informalities. No new matter has been added. Applicant respectfully requests entry of the amendments and reconsideration of the application in view of the amendments and the following remarks.

Affirmation of Election

Applicant affirms the provisional election of Group I, Claims 1-17 without traverse. Claim 28 depends from claim 10 and is included in Group I.

Specification

The disclosure has been objected to because of the informalities set forth in the Office action. The disclosure has been amended mostly as the Examiner suggests. Applicant respectfully requests withdrawal of this objection.

Rejection Under 35 U.S.C. § 112

Claim 8 has been rejected under 35 U.S.C. § 112, second paragraph, because the limitation “the hollow copper tube” has insufficient antecedent basis. Claim 8 has been amended to clarify the limitation. Applicant respectfully requests withdrawal of this rejection.

Rejection of Claims 1-5, 6, 9, 14-17 Under 35 U.S.C. § 103

Claims 1-5, 6, 9, 14-17 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Murata in view of Stimson and Gisselberg. Claims 1, 15, and 16 are independent. Applicant respectfully traverses this rejection. (Note that the Examiner erroneously uses 35 U.S.C. § 102(b).)

The Examiner asserts that Murata teaches “a pair of parallel-plate electrodes 32, 34.” However, the electrode 32 is “a ladder-shaped electrode” as specifically stated in Murata (throughout the disclosure, e.g., col. 7, lines 3-4), which is clearly differentiated from “parallel plate type electrodes” as described in col. 3, lines 28-67. Murata states: “any of the prior arts using a ladder type electrode and plate electrodes arranged in parallel gives rise to problems [of poor uniformity in film thickness]” (col. 2, lines 50-52), but Murata provides a solution exclusively to

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the ladder-shaped electrode (col. 4). This is because “the reason why it is difficult to increase the frequency of the high frequency power source in the apparatus” (col. 3, lines 3-4, lines 47-48) is different between the ladder type electrode and the plate type electrode: That is, “non-uniformity of impedance derived from the construction of the ladder type electrode is inherent in the apparatus” (col. 3, lines 5-8) whereas “the peripheral portion and the central portion of the parallel plate type electrodes differ from each other in the electrical characteristics” (col. 5, lines 50-52). In Murata, electric power is provided at multiple points located on opposing sides of the ladder-shaped electrode with respect to a width direction of the ladder-shaped electrode (fig.2). Murata gives absolutely no teaching or suggestion regarding the plate type electrode.

Thus, clearly, the Examiner is in error in interpreting “the ladder-shaped electrode 32” as “a plate type electrode” which is recited in the claims. Because the primary reference, Murata, does not teach any solution regarding the plate type electrode, this rejection could not be maintained.

Further, no reference teaches or suggests another feature recited in the claims; that is, each of multiple branches connected to the multiple supply points has a substantially equal characteristic impedance value which is adjusted by a removable adjuster. Murata does not teach or suggest any structure capable of accomplishing the above feature. Stimson or Gisselberg are irrelevant to multiple branches.

It is well settled that the combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998), and also that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). See also M.P.E.P. 2143.01. As discussed above, Murata gives absolutely no indication that multiple branches are connected to a plate type electrode, or that a removable adjuster can be used to equalize the characteristic impedance values of the branches. Stimson is irrelevant to multiple branches, and Gisselberg is irrelevant to a plasma treatment apparatus. None of the references teaches or suggests a combination of these references.

In view of the foregoing, claims 1, 15, and 16, and dependent claims could not be obvious over the references. Applicant respectfully requests withdrawal of this rejection.

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Rejection of Claim 7 Under 35 U.S.C. § 103

Claim 7 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Murata in view of Stimson and Gisselberg, and further in view of Blonigan. However, as with Murata, Stimson, and Gisselberg, Blonigan does not teach or suggest the above discussed features of the invention recited in claim 1. Claim 7 depends from claim 1, and at least for this reason, claim 7 could not be obvious over the above references. Applicant respectfully requests withdrawal of this rejection.

Rejection of Claims 8, 11 Under 35 U.S.C. § 103

Claims 8 and 11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Murata in view of Stimson and Gisselberg, and further in view of Blonigan and Chawla. However, as with Murata, Stimson, and Gisselberg, Blonigan or Chawla does not teach or suggest the above discussed features of the invention recited in claim 1. Claims 8 and 11 depend ultimately from claim 1, and at least for this reason, claims 8 and 11 could not be obvious over the above references. Applicant respectfully requests withdrawal of this rejection.

Rejection of Claim 10 Under 35 U.S.C. § 103

Claim 10 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Murata in view of Stimson and Gisselberg, and further in view of Parsons. However, as with Murata, Stimson, and Gisselberg, Parsons does not teach or suggest the above discussed features of the invention recited in claim 1. Claim 10 depends from claim 1, and at least for this reason, claim 10 could not be obvious over the above references. Applicant respectfully requests withdrawal of this rejection.

Rejection of Claims 12, 13 Under 35 U.S.C. § 103

Claims 12 and 13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Murata in view of Stimson and Gisselberg, and further in view of DeOrnellas. However, as with Murata, Stimson, and Gisselberg, DeOrnellas does not teach or suggest the above discussed features of the invention recited in claim 1. Claims 12 and 13 depend ultimately from claim 1, and

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at least for this reason, claims 12 and 13 could not be obvious over the above references. Applicant respectfully requests withdrawal of this rejection.

New claim

Claim 28 has been added, which limits the location of the multiple supply points. None of the references teaches the location. Further, claim 28 depends ultimately from claim 1. Thus, for these reasons, claim 28 could not be obvious over the references.

CONCLUSION

In light of the Applicant's amendments to the claims and the foregoing Remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any remaining concerns which might prevent the prompt allowance of the application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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